



[4910-13-P]

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2014-0650; Directorate Identifier 2014-NM-162-AD; Amendment 39-17974; AD 2014-20-01]**

**RIN 2120-AA64**

**Airworthiness Directives; Bombardier, Inc. Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule; request for comments.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc. Model CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604 Variants) airplanes. This AD requires repetitive inspections for any fuel leak in the right-hand landing lights compartment, and related investigative and corrective actions if necessary. This AD also provides for an optional replacement of the connector of the fuel boost pump canister of the auxiliary power unit (APU), which terminates the repetitive inspections. This AD was prompted by a report of fuel leaks in the connector cavity of the APU fuel boost pump canister and at the electrical conduit connection of the APU fuel boost pump in the right-hand landing lights compartment. We are issuing this AD to detect and correct fuel leaks in the right-hand landing lights compartment, which, in combination with the heat generated by the taxi lights and landing lights on the ground reaching the auto-ignition

temperature of the fuel, could result in ignition of any fuel or fumes present in the right-hand landing lights compartment.

**DATES:** This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email [thd.crj@aero.bombardier.com](mailto:thd.crj@aero.bombardier.com). You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0650; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Assata Dessaline, Aerospace Engineer, Avionics and Services Branch, ANE-172, FAA, New York Aircraft Certification Office (ACO), 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7301; fax 516-794-5531.

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2014-21, dated July 10, 2014

(referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Bombardier, Inc. Model CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604 Variants) airplanes. The MCAI states:

Bombardier Inc. has discovered fuel leakage in the auxiliary power unit (APU) fuel Boost Pump (BP) canister connector cavity. On some of those aeroplanes, leakage was also noticed at the APU fuel BP electrical conduit connection in the right hand landing light compartment. The root cause of the subject fuel leak is identified to be the improper length of the female connector keyway located in the fuel BP canister, causing a shift of the electrical harness and its seals.

Available data indicates that on a hot day, due to the heat generated by the taxi light and/or landing lights on the ground, temperature in the landing light compartment can reach the fuel auto ignition temperature. Therefore, presence of any fuel in the right hand landing light compartment is considered to be a safety hazard [fuel or fumes present in the right-hand landing lights compartment might ignite] that warrants mitigating action.

In order to help mitigate the potential safety hazard precipitated by any fuel leakage in the right hand landing light compartment, Bombardier Inc., has revised the Aircraft Flight Manual (AFM) through Temporary Revisions (TRs) 604/38 and 605/20 dated 16 June 2014 to restrict the operation of Taxi and Landing lights on the ground. Transport Canada issued Emergency [Canadian] AD CF-2014-17 [(<http://wwwapps3.tc.gc.ca/Saf-Sec-Sur/2/cawis-swimn/attachment.asp?aiid=CF-2014-17&revid=0&cntr=CF&file=CFCF-2014-17.pdf&type=PDE>), which corresponds to FAA AD 2014-15-17, Amendment 39-17919 (79 FR 44268, July 31, 2014)] to mandate incorporation of the above AFM TRs.

To address the root cause of the subject fuel leakage from the APU fuel boost pump canister wiring conduit, Bombardier Inc. issued Alert Service Bulletin (ASB) A605-28-008 that requires periodic [repetitive general visual] inspection[s] for fuel leaks and [applicable related investigative and corrective actions and] eventual the replacement of the discrepant fuel BP canister connectors [including related investigative and corrective actions] on affected aeroplanes. The ASB has been revised to include an additional inspection of the new connector wiring for damage and this [Canadian] AD is issued to mandate the compliance with ASB A605-28-008 Revision 2 requirements.

Related investigative actions include doing a general visual inspection for any fuel leak in the wiring conduit of the APU fuel boost pump in the right-hand landing lights compartment; a detailed inspection for damage of the O-rings of the fuel pump cartridge; and a detailed inspection of the wires under the wiring insulation sleeve of the new connector for cuts. Corrective actions include installing new packings on the APU fuel pump cartridge, replacing the connector on the APU fuel pump canister, and replacing wiring and O-rings if certain conditions are found. You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0650.

#### **Relevant Service Information**

Bombardier, Inc. has issued Bombardier Alert Service Bulletin A605-28-008, Revision 02, dated July 9, 2014. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

### **Other Relevant Rulemaking**

On July 24, 2014, the FAA issued AD 2014-15-17, Amendment 39-17919 (79 FR 44268, July 31, 2014), for certain Bombardier, Inc. Model CL-600-2B16 (CL-604 Variant) airplanes. AD 2014-15-17 requires revising the airplane flight manual to incorporate temporary revisions that introduce additional limitations for operation of taxi and landing lights. AD 2014-15-17 requires revising the airplane flight manual only for Bombardier, Inc. Model CL-600-2B16 (CL-604 Variant) airplanes, serial numbers 5301 through 5665 inclusive, and 5701 and subsequent. This AD requires repetitive inspections for any fuel leak in the right-hand landing lights compartment, and related investigative and corrective actions if necessary, for Bombardier, Inc. Model CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604 Variants) airplanes, serial numbers 5906, 5910, 5912, 5917, 5919 through 5932 inclusive, 5934, 5935, 5939, 5940, 5942, and 5948.

### **FAA's Determination and Requirements of this AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we evaluated all pertinent information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

### **Differences Between this AD and the MCAI or Service Information**

The MCAI and Bombardier Alert Service Bulletin A605-28-008, Revision 02, dated July 9, 2014, do not specify corrective actions if any cut is found on the wires or if any damage is found on the O-rings during certain related investigative actions. This AD requires that a replacement be done using a method approved by the FAA, TCCA, or Bombardier, Inc.'s TCCA Design Approval Organization (DAO).

### **FAA's Determination of the Effective Date**

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because fuel leaks in the right-hand landing lights compartment, in combination with the heat generated by the taxi lights and landing lights on the ground reaching the auto-ignition temperature of the fuel, could result in ignition of any fuel or fumes present in the right-hand landing lights compartment. Therefore, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in fewer than 30 days.

### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2014-0650; Directorate Identifier 2014-NM-162-AD" at the beginning of your comments. We

specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

### **Interim Action**

This AD is considered to be interim action. We are currently considering requiring a replacement of the connector of the fuel boost pump canister of the APU, and applicable related investigative and corrective actions, which will constitute terminating action for the repetitive inspections required by this AD action. However, the planned compliance time for the replacement would allow enough time to provide notice and opportunity for prior public comment on the merits of the replacement and applicable related investigative and corrective actions.

### **Costs of Compliance**

We estimate that this AD affects 92 airplanes of U.S. registry.

We also estimate that it will take about 2 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$15,640, or \$170 per product.



In addition, we estimate that any necessary follow-on actions will take about 22 work-hours and require parts costing \$0, for a cost of \$1,870 per product. We have no way of determining the number of aircraft that might need these actions.

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on

the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2014-20-01 Bombardier, Inc.:** Amendment 39-17974. Docket No. FAA-2014-0650; Directorate Identifier 2014-NM-162-AD.

**(a) Effective Date**

This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Bombardier, Inc. Model CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604 Variants) airplanes, certificated in any category, serial numbers 5906, 5910, 5912, 5917, 5919 through 5932 inclusive, 5934, 5935, 5939, 5940, 5942, and 5948.

**(d) Subject**

Air Transport Association (ATA) of America Code 28, Fuel.

**(e) Reason**

This AD was prompted by a report of fuel leaks in the auxiliary power unit (APU) fuel boost pump canister connector cavity and in the right-hand landing lights compartment from the APU fuel boost pump electrical conduit connection. We are issuing this AD to detect and correct fuel leaks in the right-hand landing lights compartment, which, in combination with the heat generated by the taxi lights and landing lights on the ground reaching the auto-ignition temperature of the fuel, could result in ignition of any fuel or fumes present in the right-hand landing lights compartment.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Repetitive Inspections for Fuel Leaks**

Within 25 flight hours after the effective date of this AD: Do a general visual inspection for any fuel leak in the right-hand landing lights compartment, and do all applicable related investigative and corrective actions, in accordance with Part A of the Accomplishment Instructions of Bombardier Alert Service Bulletin A605-28-008, Revision 02, dated July 9, 2014, except as required by paragraph (h) of this AD. Do all applicable related investigative and corrective actions before further flight. Repeat the inspection thereafter at intervals not to exceed 8 flight hours until the replacement specified in paragraph (i) of this AD has been accomplished.

**(h) Corrective Action if Fuel Leak is Found During Related Investigative Actions**

If any fuel leak is found during the related investigative actions required by paragraph (g) of this AD: Before further flight, do the terminating action specified in paragraph (i) of this AD, or repair using a method approved by the Manager, New York Aircraft Certification Office (ACO), ANE-170, Engine and Propeller Directorate, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO).

**(i) Optional Terminating Action – Replacement**

Replacing the connector of the fuel boost pump canister of the APU and doing all applicable related investigative actions, in accordance with Part B of the Accomplishment Instructions of Bombardier Alert Service Bulletin A605-28-008, Revision 02, dated July 9, 2014, terminates the actions required by paragraph (g) of this AD provided that the following actions are done, as applicable.

(1) If any damage (cuts) is found on the wires, before further flight, replace the wire with a new wire identified in kit 605K28-008A, in accordance with the Accomplishment Instructions of Bombardier Alert Service Bulletin A605-28-008, Revision 02, dated July 9, 2014.

(2) If any damage is found on the O-rings, before further flight, replace the O-ring with a new O-ring, in accordance with the Accomplishment Instructions of Bombardier Alert Service Bulletin A605-28-008, Revision 02, dated July 9, 2014.

(3) If any fuel leak is found, before further flight, repair using a method approved by the Manager, New York ACO, ANE-170, Engine and Propeller Directorate, FAA; or TCCA; or Bombardier, Inc.'s TCCA DAO.

**(j) Inspection of Connector Wiring**

For airplanes having new connectors installed in accordance with Part B of the Accomplishment Instructions of Bombardier Alert Service Bulletin A605-28-008, dated April 21, 2014: Within 6 months or 150 flight hours after the effective date of this AD, whichever occurs first, do a detailed inspection for damage (cuts) of the connector wiring, in accordance with Part B of the Accomplishment Instructions of Bombardier

Alert Service Bulletin A605-28-008, Revision 02, dated July 9, 2014. If any damage (cuts) is found on the wires, before further flight, replace the wire with a new wire identified in kit 605K28-008A, in accordance with the Accomplishment Instructions of Bombardier Alert Service Bulletin A605-28-008, Revision 02, dated July 9, 2014.

**(k) Credit for Previous Actions**

This paragraph provides credit for actions required by paragraph (i) of this AD, if those actions were performed before the effective date of this AD using Bombardier Alert Service Bulletin A605-28-008, Revision 01, dated May 28, 2014, which is not incorporated by reference in this AD.

**(l) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, New York ACO, ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

**(2) Contacting the Manufacturer:** For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO, ANE-170, Engine and Propeller Directorate, FAA; or TCCA; or Bombardier, Inc.'s TCCA DAO. If approved by the DAO, the approval must include the DAO-authorized signature.

**(m) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2014-21, dated July 10, 2014, for related information. You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0650.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (n)(3) and (n)(4) of this AD.

**(n) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Bombardier Alert Service Bulletin A605-28-008, Revision 02, dated July 9, 2014.

(ii) Reserved.

(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email [thd.crj@aero.bombardier.com](mailto:thd.crj@aero.bombardier.com); Internet <http://www.bombardier.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on September 19, 2014.

Michael Kaszycki,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2014-23145 Filed 10/02/2014 at 8:45 am; Publication Date: 10/03/2014]